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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/584,901 | 01/11/2008 | Thomas Scherer | WUE-57 | 5039 |
| 26875 7590 05/07/2009 WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202 | | | | |
| EXAMINER TAPOCAL, WILLIAM E | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3744 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,901

Applicant(s)

SCHERER ET AL.

Examiner

William E. Tapolcai

Art Unit

3744

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-24-29, 31, 32 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24-29, 31, 32 and 34-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22, 24-27, 29, 31, 32, 34-40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,513,500 to Fischer et al in view of U.S. Patent No. 4,189,929 to Russell. Fischer et al discloses the claimed invention of a cooling system for an aircraft including a refrigerating installation 4, a refrigeration consumer 8A and 8B, a refrigeration transport system 5-7, 10-12 connecting the refrigerating installation and the refrigeration consumer. However, Fischer et al does not disclose the refrigeration installation as comprising two refrigeration machines operating independently of each other and in parallel. Russell teaches in column 1, lines 6-11 that it is notoriously old to have air conditioning in which duplicate refrigeration systems operate in parallel. Thus, it would be obvious to provide Fischer et al with two duplicate refrigeration systems that operate in parallel, in view of Russell, to yield the predictable result of providing a backup system in case one system fails. The recitation in claim 34 of the refrigeration machines being controlled in a decentralized manner by an automatic and time-dependent activation is considered to be a mere functional recitation that is not supported by positively recited structure or a means-plus-function clause. The recitation in claim 36 of the refrigerating agent flowing through both a switched-on and a switched-off refrigeration machine is also considered to be a mere functional statement and not a positively recited structure or a means-plus-function clause. The number of

refrigerating machines, the type of refrigerating machine used, the type of sensed refrigerating parameters used, the operation of the refrigerating machines, the hot gas bypass valve, the shut-off valve, and the operation of the pump are all considered to be matters of obvious choice to one of ordinary skill in the art. They are all considered to be well known provisions of an ordinary refrigeration system.

3. Claims 28 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al in view of Russell as applied to claim 22 above, and further in view of U.S. Patent No. 3,216,215 to Schuett. Fischer et al as modified above by Russell discloses the claimed invention except for the refrigerant store and the amount of refrigerant being altered. Schuett teaches a refrigeration system comprising a store 12a for the secondary refrigerant. Schuett further teaches a valve for varying the amount of refrigerant flowing through the spaces being cooled. Thus, it would be obvious to modify Fischer et al so that the refrigeration system comprises a store for the secondary coolant, and also alters the amount of coolant flowing through the spaces to be cooled, in view of Schuett, to yield the predictable result of providing the necessary amount of coolant needed to perform the cooling functions required.

4. Applicant's arguments filed January 21, 2009 have been fully considered but they are not persuasive. Applicant's remarks regarding the two refrigerating machines operating in parallel and independently of each other are believed to be answered by the newly cited patent to Russell.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William E. Tapolcai whose telephone number is (571) 272-4814. The examiner can normally be reached on Mon. - Thurs., 6:30 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William E. Tapolcai/
Primary Examiner, Art Unit 3744

wet
May 6, 2009